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CHINA'S TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY SECTOR

Issues and Background

China's plan for telecommunications modernization--which entails ambitious quantitative targets as well as qualitative upgrades--is an important element of Beijing's broader economic development calculus. Beijing has budgeted $42 billion in investment for the sector through the year 2000, while Central Government allocations for this year alone amount to $6.2 billion, according to Chinese press. Domestic manufacturing deficiencies will force China to rely heavily on imports--which amounted to $2.6 billion in 1992, according to official trade data--as well as foreign funding--estimated to reach $7 billion by the year 2000, according to press reports--to satisfy this demand.

Telecommunications Modernization Goals

Beijing's broad priorities for upgrading telecommunications technology by the turn of the century include fiber optic, satellite, mobile communications, and advanced switching systems. Major national projects include:

- Upgrading by the year 2000 China's switching capacity from approximately 42 million lines at present to 140 million lines, and increasing the number of telephones from approximately 10 million telephones to 70 million (eight phones per 100 people), according to press reports. The cities should have 30-40 phones per 100 people by 2000, according to press reports.

- Installing 16 long-distance fiber-optic trunks to cover all provincial capitals and link 300 cities by 2000, building on the existing coastal fiber optic networks.

- Installing 2000 satellite earth stations and adding nearly three million cellular phone subscribers by the year 2000--up from the current level of 980,000 subscribers. Beijing expects to be using seven communications satellites with a total of 50-60 transponders by 1995 and more than 100 transponders by 2000 to support long-distance and international telephone service as well as television transmission, according to press reports.

At the same time, the Ministry of Posts and Telecommunications (MPT) is slowly losing its traditional monopoly over the telecommunications industry to: (1) the provinces--which are gaining independent import authority and pushing total Chinese spending on telecommunications modernization close to $50 billion through 2000; and (2) two new telecommunications corporations--Liantong and Jitong Corporations--established since late 1993 by a Ministry of Electronics Industry (MEI)-backed consortium as rivals to the MPT. Each has its own set of projects and potential for foreign involvement. Liantong--made up of shareholders MEI, Ministry of Electric Power, and Ministry of Railways--was created to build a second national telecommunications network to compete with the MPT in offering basic telephone services, according to press reports.

Information Technology Upgrade Plans

The State Council has tasked Jitong Corporation to carry out three "Golden Infrastructure Projects":

- *Jin Qiao* (Golden Bridge), China's version of an information superhighway. This will be a national public economic network via satellite featuring stock and business information.

- *Jin Guan* (Golden Customs), a foreign trade information network with an electronic clearance system for imports and exports. It has already started linking customs, foreign trade departments, and banks, according to industry press.

- *Jin Ka* (Golden Card), a plan to promote the use of checks and credit cards. The target is improve clearance systems via electronic links, enabling the use of one credit card valid in all of China's urban areas and all of its major banks by the end of the century. Ten cities have begun experimenting with the Golden Card system, according to industry press.

Jitong and Liantong corporations have already begun to establish ties to Western--including a number of US--companies, and are testing the limits of an MPT ban on foreign equity participation in telecommunications services.

US Angle. The United States' competitive position in China's telecommunications market is weak compared to those of its European and Japanese competitors. An internal Chinese directive promulgated in 1989 restricted the import of switching equipment from certain producers--including US firms--largely shutting the United States out of China's telecommunications market through 1993. US manufacturers today account for only 11-percent of sales, according to official trade data. Exclusionary policies in place from 1989 to 1993, furthermore, enabled European and Japanese suppliers to build a strong presence in the market that leaves them well placed to capitalize on China's telecommunications expansion plans. For example, Shanghai-Bell, a joint venture with Alcatel Bell of Belgium, dominates the switching market in China. In addition, China in May 1994 planned to reimpose regulations limiting the number of joint ventures producing switching equipment in China to five, including AT&T and Northern Telecom, according to press reports.

China's recent loosening of import restrictions--as evidenced by the revocation last year of the internal directive that had severely limited US participation--and the creation of the new corporations may restore US opportunities in China's telecommunications expansion. Indeed, Chinese press reporting suggests that China now looks to the United States first in many instances for advanced technologies, including digital switching, fiber optics, and cellular and radio communications. Furthermore, US firms have recently had more success in forming long-term business relationships with Chinese partners. Most recently, AT&T in April 1994 signed a contract to invest more than $150 million in numerous projects, including a joint switching production center in Sichuan.

Burgeoning Chinese demand for pagers, cellular systems, and communications satellites and related technologies appears to offer the most promising opportunities for US firms. For

instance, sales to China of pagers from a Motorola joint venture--which has no domestic competitors--have helped make China Motorola's single largest overseas market, even exceeding the US firm's sales to Japan. In addition, Motorola in mid-1993 landed a $200 million supply agreement with Hangzhou Communications Equipment Factory, Motorola's partner since 1991.